

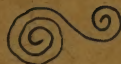
Columbia —
Souvenir, 1892.

Sykes
Iron & Steel Roofing
Company.

Niles, Ohio,

AND

Chicago, Ills.



SIXTEENTH ANNUAL
ILLUSTRATED CATALOGUE

... OF THE ...

Sykes Iron & Steel Roofing Co.,

NILES, OHIO, AND CHICAGO, ILL.,

MANUFACTURERS OF

SYKES' PATENT IMPROVED STANDING SEAM ROOFING, CORRUGATED EDGE,
AND V CRIMPED, CORRUGATED ROOFING AND SIDING AND SHEET
METAL CLAPBOARDING, CORRUGATED AND BEADED CEIL-
INGS, BOSTWICK STEEL LATH, SHEET STEEL BRICK,
ETC., FROM SHEET IRON AND STEEL, EITHER
BLACK, PAINTED OR GALVANIZED.

Our long experience having proved the same to be the most economical and satisfactory for Roofing and Siding, we have furnished material for buildings of every description, such as dwellings, store rooms, ware houses, railway stations, elevators, flour mills, foundry and machine shops, rolling mills, blast furnaces, bridge and car works, tube works, saw and planing mills, school houses, lumber sheds, barns, oil refineries, election booths, glass works, electric light plants, cattle sheds, round houses, coal tipples, woolen and paper mills, factories, churches, bridges, etc. In fact, there is no class of buildings on which our roofing, siding and steel lath is not suitable, and on which it has not been used.

DEALERS IN PAINT AND CEMENT.

INTRODUCTION.

THIS Catalogue is intended to briefly illustrate the superiority of the "Sykes Patent Improved Standing Seam Iron or Steel Roofing;" also all styles of Corrugated and other late designs of roofing and siding. Also Bostwick Steel Lath.

It will be devoted mostly to a description of the advantages we have for furnishing the same.

We hope to interest the purchasers of roofing and siding, in this our sixteenth annual catalogue, by making it instructive as well as ornamental.

We have endeavored to give you a brief description of how iron and steel are produced, taking the raw material at the "blast furnace," and following it through its different processes of manufacture, until it is put on the roof, which we trust will be beneficial to all.

Our works at Niles, Ohio, and Chicago, Ill., are furnished with the latest improved machinery for the manufacture of "Iron and Steel Roofing," as you will find by carefully reading and noting what we present to you.

Trusting you will carefully preserve this Catalogue, and when in need of anything in our line, we may have the pleasure of naming you prices, and filling your order, we remain,

Yours Very Respectfully,

SYKES IRON & STEEL ROOFING CO.,

NO. 611 S. MORGAN ST., CHICAGO, ILL.

NILES, OHIO.

POINTS OF INTEREST REGARDING

Sheet Iron or Steel Roofing, Siding, Ceiling and Lath.

COMMON Black Sheet Iron, painted, has been used for Roofing purposes, in both Europe and America, for more than a century past, and by practical tests and comparisons with other roofing materials, has proven itself to be the best for all general purposes, where perfect protection from the elements, combined with durability and economy, are desired.

A new era is now opened in Iron and Steel Roofing, by the use of a fine quality of sheet iron and steel and the application of new and improved devices for fastening the sheets. The enormous quantity of iron that has been used for Roofing purposes during the present decade, evinces the high favor in which it is held by the general public. They have learned that GOOD sheet iron or steel of suitable weight, if properly laid and taken care of, will give more satisfaction than any other known roofing material.

We will say, for the information of those who are not familiar with the lasting qualities of iron or steel roofing, that there are now in existence in many cities and towns throughout this country, iron roofs, in excellent state of preservation, that were laid between twenty and fifty years ago, and have had no repairs made upon them since, except having been cared for by coating with metallic paint once within every three to five years.

This sets at rest any claim that they rust out. We have, within the last twenty years, laid hundreds of iron roofs that are yet in first-class condition and doing the property owners good service.

All iron roofing sheets are heavily coated with metallic paint on both sides before laying, and, as there is no wear upon the under side, a periodical coat of paint on the upper surface will preserve them indefinitely.

IRON OR STEEL ROOFING IS FIRE AND LIGHTNING PROOF, and its application to a building materially reduces the rate of insurance, and in towns poorly provided with fire apparatus, is very valuable.

It affords protection where fire originates in adjoining or surrounding buildings, and in the event of fire originating within a building so covered, the roof timbers alone can be burned, the iron roof providing an effectual barrier to its spreading beyond the building wherein it originated; therefore, it is to the interest of everyone to use some style of Iron or Steel Roofing.

IRON AND STEEL ROOFING IS LIGHTNING PROOF.

SPEAKING from actual experience, we will say that a building covered with iron or steel, struck by lightning, has never been known to be damaged. The bolt striking the iron or steel, scatters the electricity, leaving no damaging effect whatever.

Having had our own building struck, while we were in the same, and knowing of others being struck, and no damage done, we claim this protection alone is worth all it costs to paint an iron or steel roof, which is all the expense there is, after one is applied.

Barns, as a rule, when struck by lightning, are full of hay and grain, and the insurance not covering the same at that season of the year, the loss is oftentimes quite considerable, and very keenly felt by its owner. Scientific professors, as well as insurance companies, substantiate the above statement.

ADVANTAGES OVER TIN.

THIS roofing is stronger than tin, *and is never injured by contraction and expansion*, as the joints are elastic and contain no solder to make them rigid. Tin plate for roofing is of inferior quality, made so to compete with iron, which is fast gaining in favor. Tin plates are made of sheet iron, rolled very thin and dipped into a powerful acid, then dipped into a solution of tin or lead and all but from two to four per cent. of the tin is run off by a galvanic process, not leaving enough tin or lead on the surface to hold solder strongly. There are always little spots on the tin plate not covered which causes it to rust quickly; and when the atmosphere or moisture reaches the iron which is poisoned with the acid, *it goes to destruction more rapidly than our sheet iron* which is never subject to such a process.

A good oil and iron ore paint is the protection of either iron, steel or tin roofing. Our quality of iron and steel both receives and holds paint better than any plated surface. *In late years the quality of tin and lead roofing plate, like that of shingles, is universally complained of.* Tin roofs get out of order very often, and are more difficult and expensive to repair, as they have to be soldered. Tin roofs require to be laid on good sheeting boards, which cost about \$1.00 more per square than sheeting for iron or steel. Our roofing can be laid over a shingle roof when desired. In view of all these facts, this roofing is the safest and best to use.

ADVANTAGES OVER SHINGLES.

OUR roofing is fire proof, and nine-tenths of the fires originate on the roof. *The average life of a shingle is ten years in towns and twelve in the country.* Shingles, years ago, were made of selected timber, but are now made of soft trees, limbs and old cuttings, as prime timber is more valuable for other purposes. Shingles are dangerous and fast growing in disfavor, and should never be used when iron roofs can be had at present prices. The Sykes Improved Roof is cheaper than shingles.

ADVANTAGES OVER SLATE.

A SLATE roof weighs from five to seven times as much as an iron roof, and requires a steep, strong and costly frame to support it without breaking from shrinking of the timbers. The slate often breaks from freezing and thawing, and from heat from adjacent fires. In many states firemen are not required by law to go on a slate roof; *for obvious reasons.* Slate are frequently blown off and are costly to repair. They cannot be walked over without breaking while repairing gutters, chimneys, lightning rods, etc., *and are not lightning proof.* Driving storms force snow and rain through under the slate into the building. They contain more heat in summer and more cold in winter. When the gutters are full of ice they will leak more than any other roof.

ON opposite page will be seen photo of "Blast Furnace," one of the latest improved, also one of the largest in the country. Daily output two hundred and fifty tons.

The stock and process for making Bessemer pig iron (briefly stated) is as follows: ore, limestone and coke.

The ore is mined and shipped here from Lake Superior. Limestone is brought from down the valley, and coke is shipped here from the great Connellsville coke regions of western Pennsylvania. The ore, limestone and coke are hoisted to the top of the furnace by means of steam power elevator, then dumped into the furnace, using certain parts of each.

The coke is used for fuel for smelting or fusing the ore, while the limestone is used for a flux for separating the impurities from the iron in the ore.

The three tall stoves in the photo are for heating the air to a heat of thirteen hundred degrees, which is forced into the lower part of the furnace through twears, which are surrounded with water.

This hot air is forced through these stoves into the furnace, by means of large blowing engines at a pressure of eleven pounds to the square inch, which assists in smelting the ore.

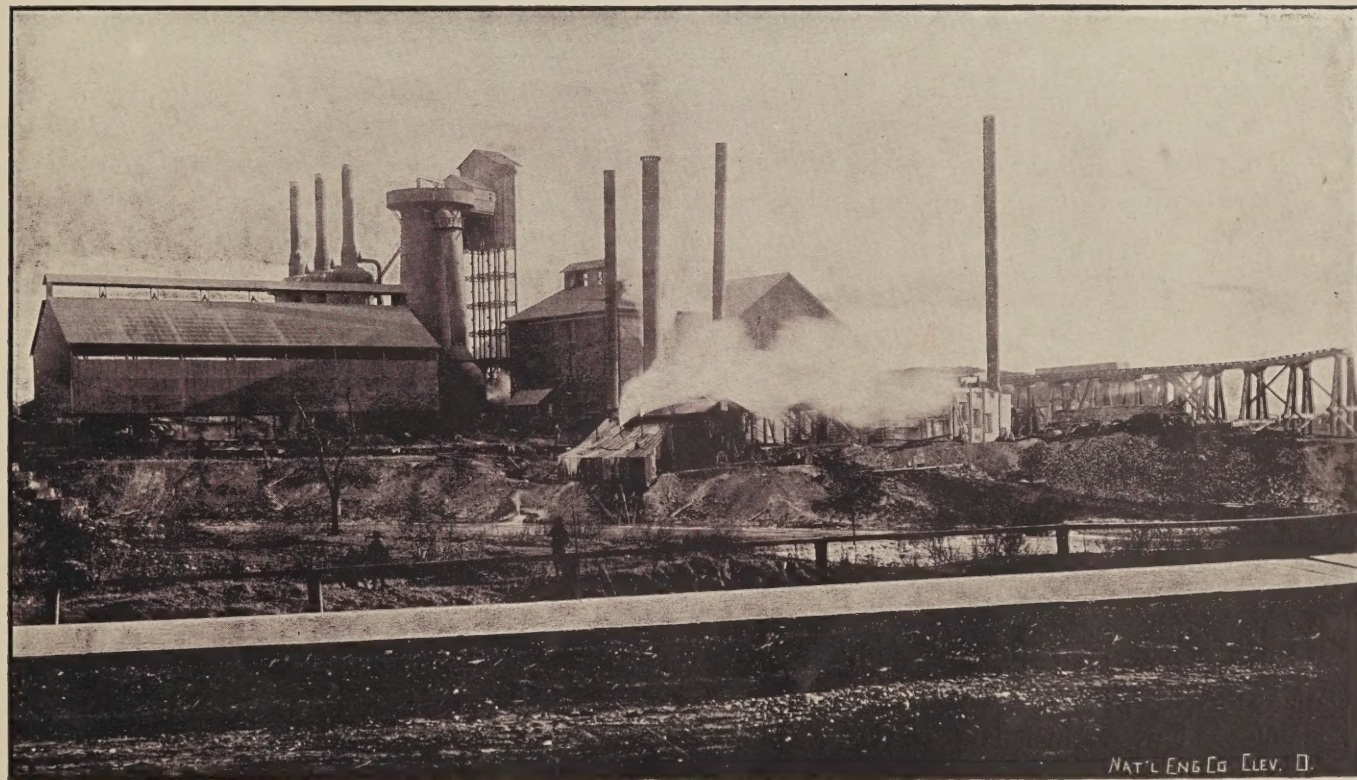
The impurities of the stock rise to the top of the molten iron in a liquid mass, which is drawn off and is called furnace cinder, or slag, which is used quite extensively in this part of the country for ballast on the railroads, street paving, or is manufactured into mineral wool, which is largely used for lining buildings.

The iron is drawn from the bottom of the furnace into the "casting house," where molds are formed in sand. The iron running into each mould makes what is termed a "pig;" these pigs weigh about one hundred and fifty pounds each, and the casting of them takes place about every six hours.

The running of a furnace is constant (Sundays and all), when in blast. The gas that forms in the furnace from the coke is conducted through large pipes to underneath the boilers, where it is used in generating steam.

It is a beautiful sight at a furnace at night when they are casting or drawing off the cinder. There are different grades of pig iron and steel, which are produced by changing the proportions of the ore, limestone and coke.

Subject of iron is continued next at "Rolling Mill," farther on.



THOMAS FURNACE, NILES, OHIO.

ON opposite page we present a photo, showing the "Russia Sheet Mill." Also "Sykes Roofing Works" in 1877, as shown in same.

On page 11 is a photo, showing "bird's-eye view" of the Galvanizing Works and Falcon Mills, owned and operated by the "Falcon Iron and Nail Co." "Old Mill" owned and operated by the "Coleman Shields Co."

All of these described works are roofed and sided with iron furnished by us. These mills are almost entirely devoted to the manufacture of iron and steel for roofing purposes, and having for many years made an especial study of this work, they are prepared to turn out a very superior quality of sheet iron and steel for the manufacture of roofing.

BRIEF DESCRIPTION OF THE PROCESS OF MANUFACTURING IRON AND STEEL.

Figure 1 in the cut, shows the pig-iron piled up along the track. This is the material from which sheet iron is manufactured. The pig-iron is put into puddling furnaces, where it is reduced to a liquid state, by the hot flames passing over it.

While in this condition it is "puddled," or kept agitated, for the purpose of working the cinder out of the iron. When the cinder is eliminated, the iron becomes granulated, or grainy, (similar to butter in churning) when it is gathered together in balls, weighing about 250 pounds. In fact, it is gathered together in precisely the same manner as butter, which is a good comparison.

These balls are taken to the squeezers, where they are formed into a small roll, which is then passed through what is called the "muck rolls;" after passing through the different grooves, it is reduced to size, say



RUSSIA SHEET MILL, NILES, OHIO. ROOFING WORKS, 20 x 40.

three-fourths of an inch thick, six inches wide, about thirty feet long. This is called "muck bar," this is then sheared into lengths of about thirty inches long, and piled eight in a pile, and then put into the heating furnace, and heated to a white or welding heat. It is then taken to the "muck rolls" and rolled down again into long bars, which are cut into lengths to suit the different widths of sheet. These are called "sheet bars," and are put into a "pair furnace" and reheated as before. They are then passed through the sheet-rolls, which are about twenty-four inches in diameter. After drawing said bars out in lengths, say four feet long, and the width of the bar, three of these lengths of sheets are put together, and again reheated, and passed through the rolls again several times, drawing them longer and thinner, then they are doubled in the center, reheated, and passed through the rolls several times again, until drawn out to the required length, finishing six sheets of light iron or steel at the last pass, after which it is "squared up" on the squaring shears, and taken to the annealing furnace to be "box-annealed." This important process requires four days to complete it, and is conducted as follows:

About fifteen tons of the iron or steel sheets are piled on a cast-iron carriage, when a large iron box is placed over the load, while the edges of the box are cemented where the box rests on the carriage, making it perfectly air tight.

The carriage is now drawn into a furnace, also sealed air tight, which is afterward fired, causing the box of sheet iron or steel to be heated clear through to a cherry heat, which requires about forty-eight hours, after which time it is brought out and left to cool gradually, not letting the air strike the sheets, until cooled through. The result of this is, there is no scale on the iron or steel so treated, which is the only kind of material we use. It is then inspected and weighed, and sent to our works at Niles, or Chicago, Ills. Or if galvanized is wanted, it is sent to the galvanizing building, and is there galvanized before shipment. When we commenced the manufacture of roofing fifteen years ago, very little of the iron was box annealed. Figure 2 represents the steel bloom for making steel sheets. These only require heating and rolling into sheet bars, after which it is rolled the same as description given for sheet iron. The annealing process is also the same as above narrated.

Skelp iron is shipped to the tube works, and there manufactured into wrought iron pipe of different sizes.



FALCON IRON AND NAIL CO.'S MILLS. GALVANIZING WORKS AND COLEMAN-SHIELDS CO. MILLS, NILES, O.

OUR NILES, O., WORKS.

THE photo on opposite page shows only part of the roofing works at Niles, Ohio. These works are connected with the rolling mills by railroad switch. The iron and steel is brought to the roofing works and painted.

The painting of light iron and steel is all done by machinery. The sheets are dipped into paint, then put through a pair of rolls, and from the rolls through a set of brushes. Every sheet in this manner is thoroughly and evenly painted with the best known metallic paint, and set away to dry.

After thoroughly drying, the iron or steel sheets are either locked together and formed into rolls fifty feet in length for the Sykes Patent Improved Roofing (containing 100 square feet), ready for shipment all over the world, or corrugated. Corrugating is done both by press and rolls. All heavy corrugated iron is painted after corrugating. We have over ten thousand square feet of floor in the Niles plant, which enables us to carry in stock a large amount of roofing and siding from which we can make prompt shipments.

Having recently put in the latest improved press and rolls for turning out all styles of roofing and siding, a day spent in visiting our works, also furnace and mills, is a day long to be remembered by those who have never had the opportunity of seeing the manufacture of iron and steel. And to those who cannot take time to come, we hope our effort to enlighten you as to the production of the same will be of value to you as well as a pleasure to ourselves.



R. G. SYKES.

NILES WORKS.

OUR CHICAGO WORKS.

THE increasing demand for our roofing, not only in the east, but in the far west, has induced us to establish a manufactory in the city of Chicago, which will enable us to reach all points with the quickest despatch. Chicago is unexcelled as a railroad center. We have put in the latest improved machinery, and stand second to none as manufacturers of iron and steel roofing. The cut on the opposite page represents our works here. The iron and steel are shipped from the mills at Niles, and upon their arrival here, undergo the same treatment as at our Niles plant.

We speak of our Chicago works with pride. Owning our own land and buildings, being located as it is in the center of the city, and having our own sidetrack, which is on the Chicago & North-Western and the Chicago, Burlington & Quincy railroads, on the one side, and the Wisconsin Central, Northern Pacific and Baltimore & Ohio roads on the other, we have the best of shipping facilities on all roads entering the city. Our machinery is said to be the finest in the west, everything of the latest design. We are well equipped for shipping in carloads or less, with the least expense for handling, an important item in these days of close competition and prices.

We have been located here only for one year and a half, but our orders for roofing and siding have far exceeded our expectations, and point to an exceedingly prosperous future.

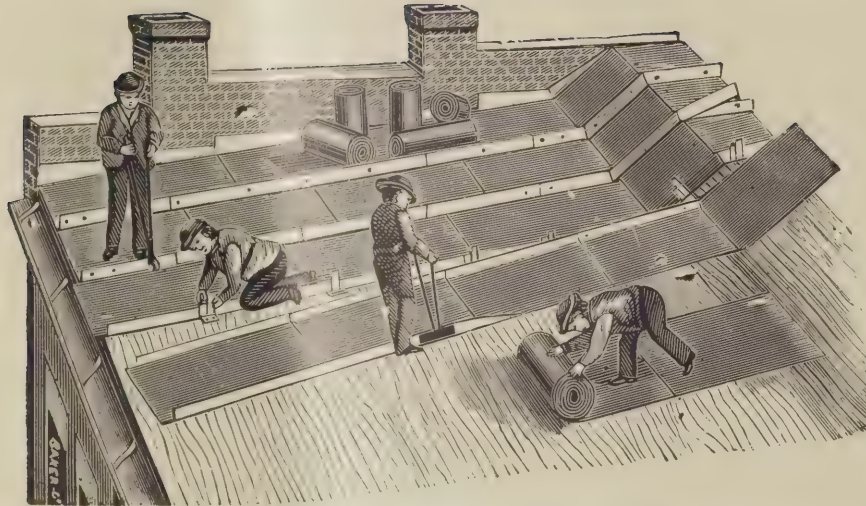
On November 14th, 1891, we bought out the Chicago Corrugating Company, and have kept part of the machinery here, shipping the remainder to our Niles, O., factory. We should be much pleased to have you call upon us when in the city, and shall take pleasure to extend any courtesies in our power.



R. G. SYKES.

CHICAGO WORKS.

C. O. HART.



Plan of Sykes' Standing Groove or Cap Roofing, and showing construction of same.

year to year, until to-day, we say without boasting, "We stand at the head, not only as one of the oldest, but one of the largest and best located concerns in the country, for supplying our customers and agents, with not only the BEST roofing, but that as cheap as any good roof in the market can be had for."

A mistake is made by many in supposing that a metallic roof is the same, whether coming from one concern or another. There are "poor, good, better and best" roofs. The success of the Sykes Patent has brought out inferior imitations, as is the case with all articles of merit, and it is most wise to compare the so-called "Patent" roofs with the "Sykes" before placing your order. The Sykes roofing has only to be seen and used to be appreciated—so say hundreds of those who have used it on their buildings for the last fifteen years.

Many of our agents claim they can secure a considerably higher price for our Sykes Improved Roofing, where its merits are well known, than for any other roof on the market.

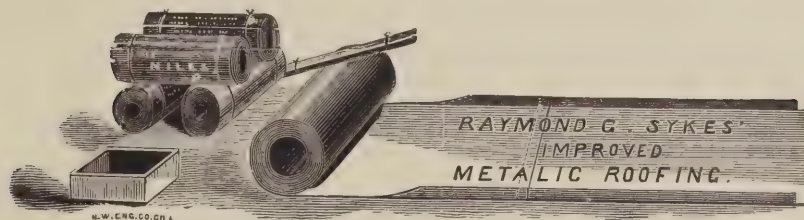
SYKES' IMPROVED METALLIC ROOFING.

LETTERS PATENT MARCH 23, 1880.

"CAP ROOFING."

THE "SYKES IMPROVED STANDING SEAM ROOFING" is furnished either from refined, double-rolled, "box-annealed" iron or steel, well painted on both sides before shipping, or from galvanized steel.

Iron, as a roofing, was but little used when we commenced its manufacture, but having spent thousands of dollars in advertising and educating the people in the use of iron and steel for that purpose, our business has increased, in fact, doubled, from



The merits of Sykes' Iron or Steel Roofing over its numerous competitors for public favor consists principally in its fastening. It is cheaper, more substantial, neater, simpler and easier put on than any other fastener now in use.

Will call your attention to the durability, superiority and advantages of our Iron and Steel Roofing. Although iron has been used for roofing purposes many years, yet but recently has it attained a state of perfection. When

an iron roof has once been put on a building, its durability exceeds all other kinds of roofing. In former years it was put on with nails and screws through the surface of the roof, which prevented expansion and contraction, and soon caused a leak around the nails or screws. In putting on the Sykes' Patent there are no screws or nails used through the surface of the roof, therefore leaving no possible chance for leaking. The Sykes' plan fully provides for the expansion and contraction of the iron.

We claim many advantages over other iron and steel roofing manufacturers. Having a large manufactory in the east at Niles, O., which is the centre of the manufactory of sheet iron and steel of this country, enables us to get lowest prices and better stock than many of our competitors. We propose to give our patrons and consumers the benefit of same. We have a superior brand of iron and steel for the Sykes' Roof; use nothing but Box Annealed Iron and Steel, therefore no scaling off of paint as in open Furnace Annealed Iron and Steel which is used by many other roof manufacturers. We also pay particular attention to the painting of our roofing, having it well painted on both sides, and using only pure linseed oil and best of paint known for iron or steel.

The manner in which our roofing is prepared is a decided advantage over those prepared in sheets. All the cross seams are locked and grooved, making a perfect joint, before leaving our factory. We make the sheets or rolls any desired length, to suit the building it is to cover. In ordering roofing be careful in measuring. Send us the exact length of roof, allowing $1\frac{1}{2}$ inches to bend over eaves, and six inches to turn up for flashing against the walls; or when it sheds both ways and you join it on the cone, allow $1\frac{1}{4}$ inches on each side for cone connections. If no lengths are given, but simply the number of squares, we then put it up in rolls of 50 to 55 feet lengths, wrapping it with heavy paper and tie it with wire. It is then ready for shipment.

In this way the side edges are turned up on the roof, which is a decided advantage over all other metal roofs prepared in sheets. In our plan you get perfect cross seams. When roofing is put on in sheets the cross seams cannot be made perfect on the building, owing to the uneven sheeting boards, knot-holes, cracks, etc.; besides, it makes double the labor. Neither do we notch in the corners which is equally bad. Our cross seams are turned up the full height of the side edges, leaving no leaky corners.

Our roofing does not have to be boxed, thus saving an additional expense to customers; and it is much easier handled in shipping, and one-fourth the labor to get it onto the roof. Our roofing is not an experiment, but has an established reputation in all the States and Territories, and is endorsed by all who have seen or used it. It is easily applied by any ordinary mechanic. It is so constructed that any or all of it may be removed if damaged by any unforeseen cause, or placed upon another building.

The foregoing facts should be sufficient evidence of superiority in favor of the Sykes Roofing to any other kind now in use.

Iron roofing can be repaired. If by any accident, such as blowing down of chimneys, etc., the roof should become damaged, it can easily be repaired and made as good as new by simply mixing a little iron ore with linseed oil to the consistency of putty, and applying to the damaged place.

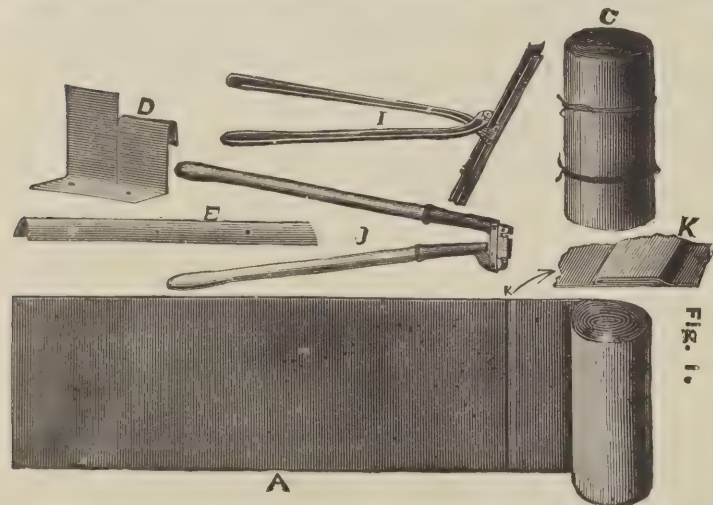
An iron roof, to be kept in good condition, requires painting once in three or five years, and the difference it makes in the appearance of a building more than repays for the paint and the expense of putting it on. The cost of an occasional coat of paint is small when compared with the constant repairing of other kinds of roofs.

NOTICE.

WE send printed instructions for applying our roofing. We prepare the Sykes Patent Roofing any length to suit the building to be covered. Each strip is twenty-six and one-fourth inches wide and finishes two feet in width, or a 50 ft. length will finish 100 square feet on the building. We also furnish all trimmings to complete the amount of roofing ordered, consisting of Nails, Caps, Anchors, Fasteners, and sufficient dry paint for a coat after the roof is laid. This extra coat of paint should always be applied when the roof is finished, as the roofing gets more or less marred and scratched in putting it on. Felting should be used under all metal roofs when applied over foundries and engine rooms, or where steam, gas or vapor comes in contact with the iron.

The Sykes Roofing can be applied to all classes of buildings and on any pitch down to one-half inch fall to the foot.

The weight of the Sykes Roofing will not exceed 90 lbs. to the square when finished on the building. Its durability is not questioned by those who have given it any attention, or had ways of knowing of its lasting qualities. We have in this vicinity iron



A—Showing Iron as put up ready to lay with cross-lock, and roofing turned. B—Cap finished. C—Strips put up to Ship. D—Cleat or Fastener, and Key. E—Cap for Standing Seam. F—Roofing Tong. G—Section showing Cross or Grooved Lock. H—Punch.

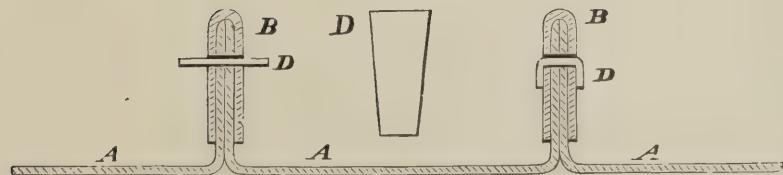
roofs that have been in use from one to forty years, and the oldest is yet good. This should be sufficient evidence of its lasting qualities.

The tools needed to apply the Sykes Patent roof consist of a punch, cap, squeezers and one or two pairs of tongs for turning the side edge. These tongs are so constructed that you can set them to turn 1 inch, $1\frac{1}{4}$ and $1\frac{1}{2}$ inch, and will turn round or square corners. These tools will be furnished to our agents at cost of manufacture, or will lend them for the first order by parties paying return charges on same. Every person, when returning tools to us, should have their name on the tag, so we would know who to credit them to when received. Also notify us of the shipment and pay return charges.

Consult your own interests and try the

SYKES' PATENT IMPROVED ROOFING.

COST OF LABOR IN APPLYING THE SYKES IMPROVED ROOFING.

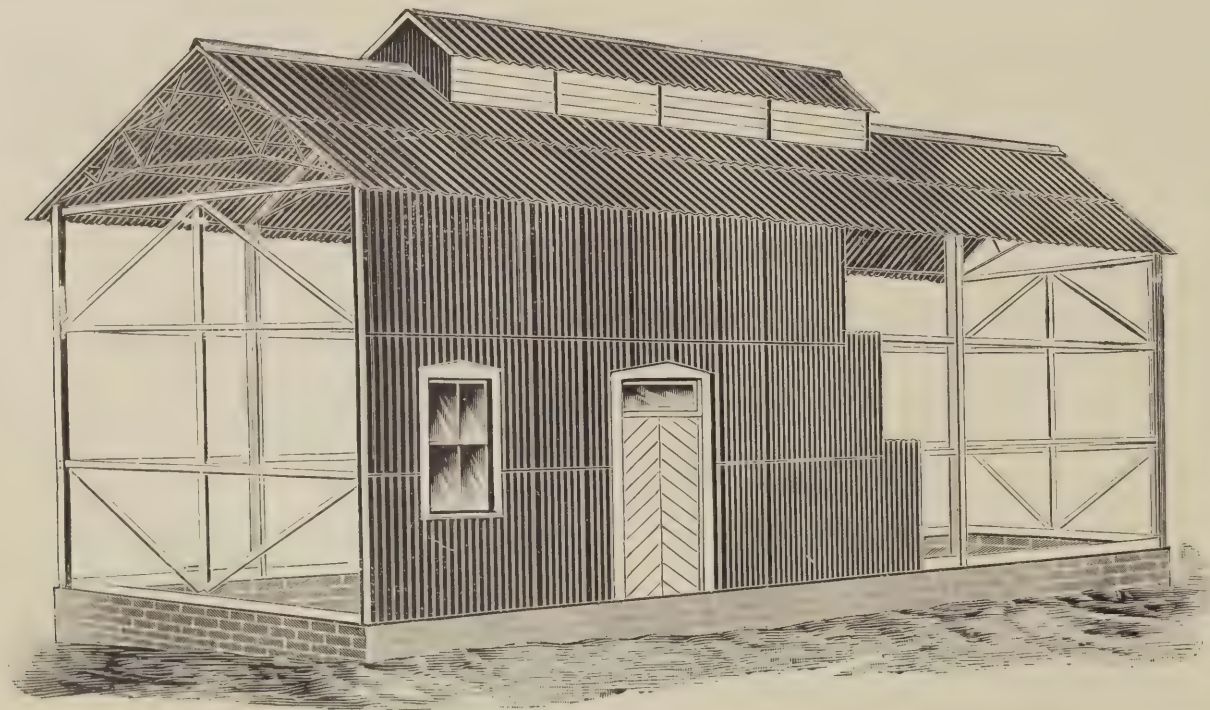


cost. But the above will give you a very good idea as to the cost of applying the Sykes' Improved Roofing.

The price varies from 20 cents to 50 cents per square, owing to the size and pitch of the roof. On an ordinary pitched roof one man can lay from ten to twelve squares per day. So you will readily see that the Sykes Improved Roofing is laid very fast, and as wages in different localities vary, you will have to use your own judgment to the actual

Have no fears to send your orders for the Sykes Improved Roofing, as we guarantee low prices and that the roofing will be satisfactory in every respect, as it is the best and latest improvement over all other styles of roofing. We make prompt shipments, as we carry a large stock on hand, and ship all roofing fourth and fifth class and get lowest rates.

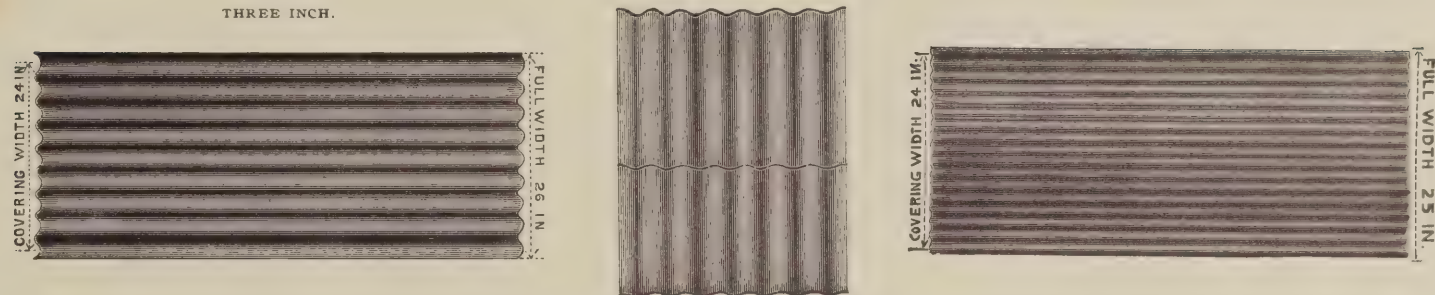
CORRUGATED IRON APPLIED TO IRON FRAMES WITH IRON STRIPS AND RIVETS.



Shows Application of Corrugated Iron on Skeleton-frame Building, made of Angle Iron or Timber.

For a cheap, durable, fire-proof covering, Corrugated Iron is unequaled, and is extensively used all over the country for all kinds of buildings, porticos, etc. If parties ordering Corrugated Iron will give exact length of rafter and width of roof, as per diagram sheet, we can often send sheets of right length to fit roof and sides, and thus save labor, cutting and wasting of iron.

CORRUGATED ROOFING AND SIDING.



CORRUGATED SHEET IRON OR STEEL.—PAINTED OR GALVANIZED.

WE desire to call your attention to the following illustrations of corrugated sheet-iron, for roofs, sides and ceilings for fire-proof buildings. Nos. 20, 22 and 24 can be applied on wood or iron purlines without sheeting. Standard requires sheeting. We manufacture four different sizes of corrugations. Three inch, two and one-half inch, one and three-fourths inch, one and one-quarter inch, measuring from center to center of the corrugations. The two and one-half inch is the standard or one generally used for roofing or siding. One and one-quarter inch, next size, is used for siding and ceilings.

We can furnish any length up to 120 inches long. Corrugated siding for grain elevators. We recommend the use of short sheets; when applied they will run up and down the building, giving the more elasticity to the iron and preventing its buckling (as other iron does) when the building settles.

In laying we lap the sheets on to the one below about one and one-half inches (as shown in cut), then nail through upper sheet, about one inch above the lap, thus allowing for movement of the iron when the building settles.

We furnish more heavy corrugated iron than any other manufacturer, and usually sell the same by the pound. All our corrugated is very uniform, which is a great saving in applying the same to the building. We recommend the Sykes Improved Standing Seam Roofing, which can be used in place of light corrugated. Send for prices and investigate our facility for furnishing roofing and siding.

CORRUGATED ROOFING AND SIDING.

ONE CORRUGATION FOR SIDE LAP.

No. 22, three inch lap at end, weighs about 155 lbs. per square. No. 24, three inch lap at end, weighs about 125 lbs. per square. No. 26, three inch lap at end, weighs about 100 lbs. per square. No. 27, three inch lap at end, weighs about 90 lbs. per square.

Large roofs with long runs should have two corrugation laps in place of one.

Orders for crimped or corrugated should be sent in two or three weeks before wanted, as so many different lengths are required, that we do not always keep in stock. Usually carry No. 26 inch stock, 6, 7, 8, 9 and 10 feet in length.

We have all our Roofing Iron made from extra stock and have particular attention paid to the rolling and annealing of same.

You will find it to your interest to trade with us, as we guarantee you bottom prices.

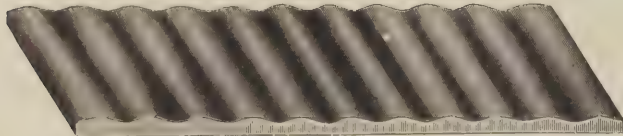
RIDGE ROLL CAP.



RIDGE CAP.



Used on Ridge and Hips where Tile and Corrugated Roofing is used.



Shows our joint of Corrugated Wood, to be used between the Corrugated Iron Roofing and Siding and Combing Cap on each side of ridge of the roof.

The Weights of Iron and Steel Sheets before being painted are based on Birmingham Gauge, as given in Haswell's Engineers' Book as follows :

No. of Gauge,	27	26	24	22	20	18	16
Weight per square ft.,	.64	.72	.88	1.12	1.40	1.96	2.60

No. 27 is known as STANDARD ROOFING GAUGE, and always shipped when the gauge wanted is not specified. No. 27 Birmingham Gauge is the same as No. 26 American Gauge.

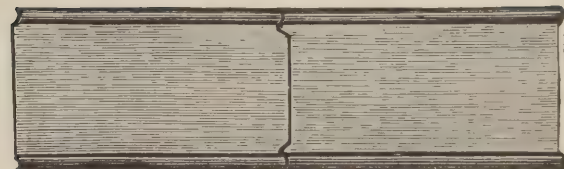
APPROXIMATE WEIGHTS OF PAINTED IRON AND STEEL ROOFINGS.

OUTSIDE MEASUREMENT.

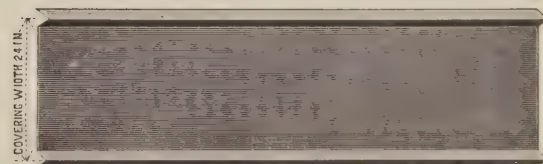
No. 27,	-	-	-	-	75 lbs. per square.
" 26,	-	-	-	-	83 " "
" 24,	-	-	-	-	103 " "
" 22,	-	-	-	-	125 " "
" 20,	-	-	-	-	156 " "
" 18,	-	-	-	-	220 " "
" 16,	-	-	-	-	295 " "

Shipping weights when packed in crates, are 5 to 7 pounds more per square.

CORRUGATED EDGE.

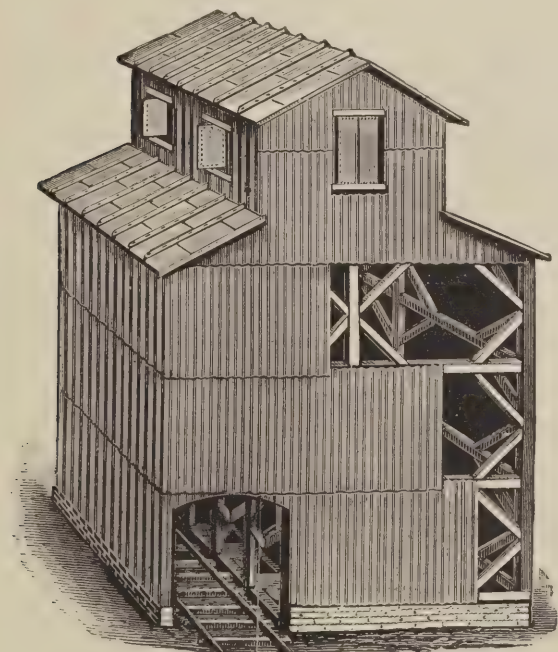


CRIMPED EDGE IRON.



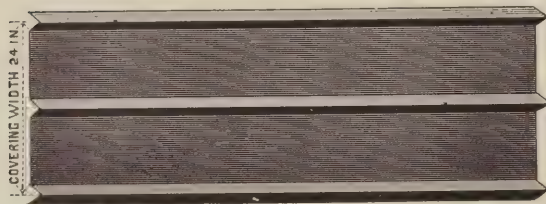
Used for roofing and siding, making one of the best materials for siding buildings where *cheapness and safety from fire* is desired. It can be laid very rapidly.

When no sheeting is used, the rafters or studding must be just two feet apart from center to center. We ship in sheets 24x96 inches, and the sheets can be cut to any length without waste of iron.



CUT SHOWING
SYKES' ROOF
AND
CORRUGATED SIDING.

THREE CRIMPED IRON.



We can furnish any length sheets you may require up to 120 inches, as our works are connected with the mill, and we can have it rolled to any required length without extra charge or waste of iron, which advantage we have over all other manufacturers of roofing.

We use standard gauge for general purposes, but can furnish No. 22 and 24 when required. For further particulars and price list apply to the manufacturers.

BEADED SHEET IRON FOR CEILINGS AND SIDINGS.

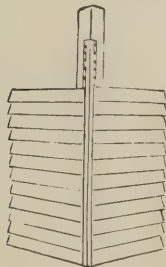


Shows sheet of Beaded Iron for *Siding and Ceiling*. Sheets, when beaded, cover 24 inches from center to center of outside beads, and can be furnished any length up to 8 feet, in Standard gauge, Nos. 26 and 24. The beads are small corrugations, $\frac{3}{8}$ inch wide and $\frac{3}{8}$ inch deep, and 3 inches from center to center. This makes a very slightly and substantial ceiling, and is easily and rapidly applied.

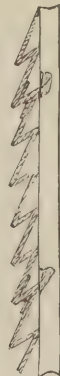
IRON OR STEEL CLAPBOARDS FOR SIDING.

USING CONVEX AND CONCAVE CORNER BOARDS.

Superior to Corrugated Iron, Wood, or Stucco, One-third the cost of Brick or Stone. Rated about the same as either by the Insurance Underwriters. Neat in appearance, easily applied. Its lasting qualities compare with Brick or Stone.



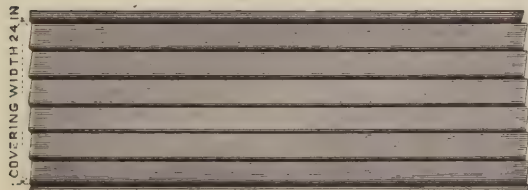
Shows Convex Corner Board applied, also Clapboards laid on each side partly finished.



Shows sectional view of Clapboard with Lap Joint and nail partly driven. This lap forms hook joint, and if the nails are driven secure with a nail sett, the joint will be thoroughly water tight.



Shows section of Convex Corner Board. We make both Convex and Concave.



Shows full sheet of Metal Clapboarding as shipped.

A—Sheet ready to apply on sides of building to studding or rough boarding, where nails are to be driven at every studding. B—Upper flange joint. C—Lower flange that fits over and under flange of upper sheet. D—Where nails are to be driven after two sheets are joined; follow up with nailing at each panel and studding; if laid on sheeting nail under flange every two feet; this fastens each sheet securely to studding or sheeting. At openings or endings, cut off any surplus, using care not to bend or tear the panel at offset or base, and apply this piece in commencing the next course.

Favorite Summer Resort. ~~Feb.~~

CASCADE HOUSE,

A. F. HANNAH, PROP. R.

POST OFFICE, Nelson Ledge. O. Feb'y. 2^d 1893.

Sykes Iron & Steel Roofing Co
Niles, Ohio.

Gentlemen!

Will you please inform me at what price you will furnish iron roofing for my proposed new barn, to take the place of the one destroyed by fire on the evening of Jan'y. 8th. last? The burned barn was 30 X 70, built and roofed with your roofing in 1887; and I firmly believe if it had not been for the iron roof, which held the flames down until the whole structure was ready to fall, that it would have been impossible to have saved my hotel which was only 62 feet away. I had no insurance, but propose to build again on the same plan and want your roofing, which I consider the very best among the several kinds I have examined.

Yours truly

A. F. Hannah.

TESTIMONIALS.

K. & Co., Peoria, Ill., Jan. 17th, 1893.—Please quote us your lowest prices for your Steel Roofing No. 27 gauge, also your corrugated siding No. 27 gauge, including nails and paint, and a set of tools loaned for putting on same.

The writer is a stockholder in the Marseilles Mf'g Co., and they state that they have purchased from you from time to time, and that your goods have given them good satisfaction. We shall want quite a quantity of both, and await your early answer.

HON. C. D., "Lakehome," Mt. Vernon, O., April 9th, 1893.—Referring to yours of the 1st, I beg to say that my experience in the use of your roofing enables me to express a very satisfactory and high appreciation of its utility and durability.

Your catalogue has not reached me. I wish you would send me a new copy. I cannot serve you as an agent for the sale of your roofing, but recommend to you ———, of Fredericktown, O. He is a carpenter and builder of intelligence, integrity and influence in his business. I think he will accept the place, and I cannot think of a better or safer man to promote your interests.

S. P. S., Grange, Pa., Oct. 22d, 1892.—I received the bill of roofing, together with tools, all right. I have the roofing on and the people all say it beats all they ever saw. I thank you for your prompt shipment and the "good goods" you sent me.

H. R., Jelloway, O., Nov. 18th, 1892.—I send your roofing tools to-day. I think I have the best roof now. There are many more that want the roof some time later.

J. H. K., McClellandtown, Pa., May 2d, 1892.—Your agent at "High House" is five miles from me and lives in Georges Township. If German, Luzern and Menallen Townships are not taken I would like to have them.

The last roof I sent for is giving universal satisfaction, and seems to be in advance of any steel roofing in this section (as regards quality). I hope to have a favorable answer.

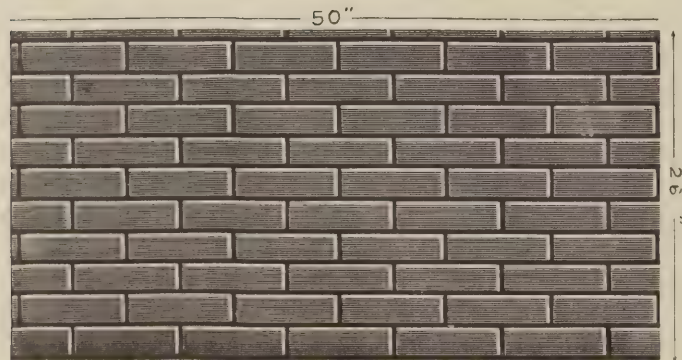
E. W. G., Pravo, Jefferson County, Ohio, Sept. 12th, 1892.—About three years ago we bought your roofing from your agent ———, and he put it on our dwelling. It needs painting again, and we have no dry paint on hand, having used what you sent. Your "Iron Clad" paint we consider the best of all, and would like you to ship us 20 lbs. to Hammondsville, Jefferson County, Ohio, and send me bill of same here. The roof gives good satisfaction.

J. S. C., Mt. Sterling, Ohio, June 13th, 1892.—Enclosed find bill lading for tools shipped to-day. I am well pleased with the roof since getting it laid and think it far superior to shingles.

S. S. W., Highup, N. Y., Oct. 22d, 1892.—I am very sorry that I could not have returned the tools before this, but we have been busy with other work and did not apply our roof at first arrival of the same. There have been several here looking at those roofs. All think they are good roofs and very nicely put on. They are universally admired by all who see them, and I think if they do not stop water from coming in, nothing will. I shall urge all in want of roofing to use yours.

SHEET STEEL PRESSED BRICK.

MADE OF SHEET STEEL; BLACK, PAINTED, OR GALVANIZED; NO. 26 BIRMINGHAM GAUGE,
WEIGHING ABOUT 85 POUNDS TO THE SQUARE.



Shows Steel Pressed Brick as shipped ready for application.

SEND FOR PRICES AND SAMPLES.

THIS is an entirely new device in sheet steel building material, lately placed on the market. We feel confident that builders, architects, contractors and property owners will see the advantage of this pattern in sheet steel for outside covering on buildings of all kinds, in preference to the old style "flat" iron. This new form has the perfect appearance of the finest brick made.

It can be applied by any mechanic; no waste; lays perfectly smooth, and, after painting, can not be distinguished from Philadelphia pressed brick. The Insurance Underwriters often give this style of covering the same rating as brick or stone, and the relative

difference in cost is: (common brick), for brick and mortar, 12 in. thick, 10 ft. square, surface laid, \$21.00; sheet steel pressed brick applied, painted and penciled, 100 square ft., \$6.25, or nearly three-fourths less.



BUILT IN 1872.

RESIDENCE AND DWELLING OF R. G. SYKES, ROBBINS AVENUE, NILES, O.

ROOFED WITH IRON.

OIL CITY TUBE CO.

THIS building was erected in the year 1886, by William Hanley, contractor and builder. Sykes Iron & Steel Roofing Co. furnished the corrugated roof and siding, requiring about one hundred tons of No. 20 gauge iron.

In October, 1891, the Tube Co., finding it necessary to enlarge their plant, contracted with Mr. Hanley to add to said building 325 feet. The contract for the roofing and siding was placed with us, (and promptly filled) requiring another hundred tons of material same as first.

This building now covers a space of 625 feet in length, and 200 feet in width, all in one building, requiring over two hundred tons of corrugated iron to roof and side it.

We kindly refer you to them as to our manner of dealing and quality of stock we furnish.



OIL CITY TUBE WORKS.



RESIDENCE OF C. EASTHOPE, NILES, OHIO.

House and Barn roofed with Iron. House built in 1872, roofed by R. G. Sykes. There are eleven hips and three valleys. The Sykes Patent Cap Roofing can be put on any style of building, making a first-class job. The above roof is as good as the day it was put on, as far as can be seen.



AMERICAN TUBE & IRON CO. MILLS, YOUNGSTOWN, O.

These works as well as their large works at Middleton, Pa., are roofed and sided with Corrugated Iron. Having furnished them hundreds of tons roofing and siding, we would kindly refer you to them as to our Superior quality and manner of dealing.

TESTIMONIALS.

We give herein a few only of the very many flattering testimonials from the thousands who have used our Sykes roofing. Being one of the oldest metallic roofing concerns, and having sent our goods to every state and territory in our own country, as well as to Australia, Turkey, Brazil and other foreign countries, we could fill this little book many times with good things said of our Sykes roofing.

The following letter was received by the Sykes Iron & Steel Roofing Co. and shows a Pennsylvania German's appreciation of the roofing in his own characteristic language:

Dear Sir:

Jan. 24, 1891.

Now I will let you know I am pleased with your Roofing. they didnt drift any snow into the building as under the Slade. Now I have 3 Kinds of roofing and yours is the best. Now wats your lowest price if I go agent for you. Now let me know and give me your agent rule.

Now I can many here. Every one they see it, they say I like to have it. Now is just my time to sell it, so I can put it on in spring.

Now please and give me your lowest price and give me a chance, and I will sell for you much as I can Write soon and let me know.

Yours truly,

* *

FRENCH LUMBERING CO., No. 134 Bridge Street. Chippewa Falls, Wis., May 25, '91.—The metal roofing we received from you and we used in roofing our barns gives the best of satisfaction, and we consider it the best roofing we have seen for the price. It adds much to the looks of the buildings and gives it a neat appearance.

R. B. HELLER & Co., Napoleon, O., June 3rd, 1891.—Ship us by R. R. at once 15 squares steel roofing. *Send quick.*

P. O. MUNSON, 519 N. Kellogg street, Galesburg, Ill.—In regard to your steel roofing, I have used it on a building at my home and I think it makes a No. 1 roof and when my shingles wear out on my other buildings I will put on your steel roof. I have also put on a roof for Mr. John Johnson of Galesburg and he was well pleased with it. And I think it will outlast any other roof made. I hope you will have good success with your roofing in this part of the country.

C. W. YOUNG & Co., Jamestown, N. Y., Jan. 2nd, 1892.—We have been greatly disappointed in getting money on contracts for buildings for which this iron was used. We have between three and four thousand dollars standing back on the same, but expect to get it in a few days, when we will remit you to balance your account in full. In the meantime we send you our check for "one thousand dollars" to apply on the same. Business outlook for 1892, *good.*

JOHN P. BASTEDO, Rocky Hill, Somerset County, N. J., May 27th, 1891.—I received your postal. Would like you to ship goods as quick as possible. In need of them. Will have another order in a few days. I would like you to protect me in or about 12 to 15 miles around this place, which includes Princeton, Hopewell, New Brunswick, Blawnburgh, Harlingen, Grigstown and Kingston. I will furnish and complete in or about any of these places. Please state if you will protect me in or about these places as much as you can. I am introducing your roofing, etc., all over this section of country and towns stated.

J. B. BASSETT & Co., Minneapolis, June 15th, 1891.—We have used quite an amount of your iron roofing in covering our saw mill and plow works. We found it very handy to put on and as far as we are able to judge as good an article of roofing as any we know of. Should not hesitate to apply more of it if needed.

AMOS WOLF, CASHIER EXCHANGE BANK, Lanark, Ill., Dec. 28, 1891.—Having used your roofing on two large barns of my own in the last year, besides furnishing the roofing for others, I desire to say that I am well pleased with it and find others feel the same. We think the new buildings in this vicinity will be roofed with your roofing hereafter.

S. H. GLOSSNER, Blanchard, Centre Co., Pa., March 19, 1891.—Please ship me fifteen and a half squares (15½) steel roofing to Mill Hall, Clinton Co., Pa. Please find enclosed check for bill of March 18, 1891, fifty-one dollars (\$51).

DAVID FORTNEY, Windsor, Ashtabula Co., O., Jan. 5th, 1892.—The steel roofing I bought of you last Fall gave perfect satisfaction to my customers, and I think it is the best roofing for the money we can get, and I am in hopes to handle a great deal of it another season.

JOHN G. HERINGTON, Mechanicstown, Carroll Co., O, February 16th, 1891.—Please send me 4 squares of your patent cap Bessemer steel roofing standard gauge. I think I can sell considerable of your roofing the coming season. The parties I roofed for last season are well pleased with the roof.

C. L. HOLTZER, Delmont, Pa., May 12, 1891.—Please ship me twenty (20) squares of Sykes Patent Cap Iron Roofing. Please ship it as soon as you get this order. I have not received the last order yet. It has not arrived yet at the station, so please ship this order so I can get it this week yet if possible.

JOHN H. LAINGE, Gilsum, N. H., June 10, 1891.—Please send me 21 squares of the Sykes Patent Iron Roofing and nails to put on over the old shingles. I have been quite sick, have not put mine on, but sold some. It is the first iron roofing in town and everyone speaks in praise of it. I sold to John S. Collins, a manufacturer of woolen goods.

L. P. JENSEN, So. Lyndeborro, N. H., June 16th, 1891.—Please find enclosed \$94.50—\$84.25 to pay the last bill and \$10.25 for the tools you sent me. Please send me receipt. Send me also 10 squares of roofing to So. Lyndeborro by the Pennsylvania R. R. The last lot to Harrisville came prompt and charges all right.

I am trying to get the job of covering the main building at the county farm, Milton. It will take about 60 squares or more. If you should hear from that quarter I hope you will refer them to me as your agent.

B. F. BIGGS PUMP CO., La Fayette, Ind., May 23, 1891.—The Iron Roof we purchased of you some time ago has proved perfectly satisfactory to us. We had no trouble in putting it on with the tools you sent with it. We had a "Patent Paper" roof on for three years, but it proved to be a worthless article after the first year, and we have replaced it with your iron roofing, and we believe it is good for fifty years if kept painted once in two or three years. We have had two buildings covered with tin in the past five years, and we have to have a tinner go over them, soldering broken seams, every year. The expansion and contraction caused by heat and cold is very trying on the joints. We do not see how it can do your roof any harm from this cause. If we need any more roofing will certainly use yours.

STREATOR CORNICE & ROOFING CO., Streator, Ill., Aug. 17, 1891.—We wish to say in regard to your Sykes Standing Seam Iron & Steel Roofing, that we have worked at the trade some twenty years and have laid about every kind of roofing made, but as yet have found nothing to at all compare with yours. It is *the* roofing and no mistake.

THE LIFE OF IRON ROOFS.

MARSHALLTOWN, DEL., September 17, 1888.

To the Editor: Since the article, "The Life of Iron Roofs," appeared in *The Iron Age*, I have received numerous inquiries for further particulars concerning the roofs alluded to. If it will interest your readers please say the sheathing used was made of stock boards laid as closely as possible. The underside of the metal had one good coat of paint, but was not otherwise protected, and, as far as I can observe, has not rusted. The gauge of iron used was No. 26. The cleats on the standing seams are not exposed. Mr. Caleb Marshall, who owned the property from 1837 to 1861, informs me that I made an error in my statement on August 16, in that the barn roof was put on in 1840, and not in 1846. I have about 75,000 square feet of iron roofing which, after many years of service, has been very satisfactory. Yours respectfully, J. R. BRINGHURST.

JOHN H. SHRINER, Dawn, Mo., May 19, 1891.—I return tools this day. Roof went on fine, had a rain and hail storm last night and not a drop of leak. I am satisfied I have a No. 1 roof. I will be pleased to act as your agent for Dawn and vicinity.

G. K. FLOWER, Pittsburgh, Pa., Aug. 11, '91.—I should have acknowledged receipt of roofing O. K. before this time, as it came in a week ago.

Much pleased that there were no creases. Will roof a house next week and soon order for two or three more.

LEWIS E. HASERODT, Elyria, O., Nov. 23, '91.—Enclosed please find draft amount of nineteen dollars and fifty cents (\$19.50) to balance my account. Please acknowledge receipt. I have written you about taking the agency for the eastern part of Lorain county, but have had no reply. If you conclude to let me have it, please let me know at once, and I will keep the tools; if not, I will return the tools at once. I am well pleased with the roofing, and it came just in time to get it on before the storm.

GEO. B. FITZSIMMONS, Marysville, Aug. 11, '91.—I enclose balance I owe on roofing, six dollars and thirty cents in all.

Wish you a prosperous and a happy future.

AMOS G. JACOBS, East Berlin, Adams County, Pa., June 9th, 1891.—Sykes Iron & Steel Roofing Co., Niles, Ohio, Dear Sir: Ship to my address 15 squares iron roofing, same kind I had before.

TO HARDWARE MEN, TINNERS, ROOFERS, CORNICEMEN AND BUSINESS MEN IN GENERAL.

WE wish to address one page in our catalogue to the men engaged in the above lines of trade, feeling that perhaps it may result to their advantage, as well as to our own. That the use of iron and steel, in one form and another, for purposes of roofing and siding of almost all classes of buildings, is largely and steadily increasing, is quite generally known; that in the comparatively near future it will form the principal materials for these uses, no one who has the means of becoming acquainted with the situation can doubt; so that sooner or later, there must spring up in each town of all sections, a demand for these materials. We have always rightly figured that when we ship an order of roofing into a town where we have not hitherto sold, that that roofing is going to please and satisfy its purchaser, that others besides will see it, and recognize its advantageous features, and they in time will become purchasers, likewise. It is not usually long before we have an application from men in some of the above lines (theirs being the trades to which, perhaps, roofing is most closely allied), asking for the agency of our goods in their town and vicinity, and in this way we have established hundreds of agencies in almost every state and territory, from Maine to California. We have men as agents, who devote their entire time to it, and do little else save selling and applying our materials, while others, in some particular lines of trade, combine this business with their own, order roofing, siding, etc., and apply it for the parties needing it, thus taking care of the generally growing local demand. Each one agrees that it yields handsome returns in proportion to the time and money expended. Consequently, it is to our advantage to secure as large a number of agents as possible, and it is also as surely to the advantage of some good live business man in each town, to secure the exclusive sale of our materials, in his town and vicinity. Let an order of roofing be introduced into a place, and it is at once seen and appreciated, when, with a little push and energy on the part of someone interested, a lively demand will be created, which will pay well for the effort. Would you not like to supply this demand in your town? If so, kindly let us hear from you, and see elsewhere "TERMS AND INSTRUCTIONS TO AGENTS."

AGENCIES.

AN agent for our goods means simply a customer for his place and vicinity. He buys his goods from us when wanted and makes his own selling price to customers. Should he desire to advertise in his local papers, we furnish electrotypes free for that purpose. We give certificate of agency and territory free, but require him to buy tools for applying our goods (which we sell at cost at manufacturers' price) within three months, otherwise the agency will be considered revoked at our option.

He may hold agency so long as he complies with contract terms and buys not less than \$150 worth of goods per year. Should he wish to abandon agency at any time we will buy his tools at first cost, less a fair amount for wear of same.

A business man in any line should put himself in good shape for doing business. Therefore it is to the best interest of agent to buy his tools to save return charges, and keep a small stock of goods on hand for small jobs and instances where job would be lost if consumer had to wait for goods to be procured from factory.

When anyone establishes himself as our agent with tools, we refer all inquiries from the vicinity to him and protect him as far as possible. Where we have no agent we sell direct to consumers. Anyone may buy and sell our goods in territory not taken.

Agents desiring to build up a large trade, give first-class satisfaction, and baffle competition, should sell only the best roof as regards construction and materials, and be energetic and business like at all times.

No goods shipped to be sold on commission. Write for catalogue, prices and territory.

TERMS.

Goods sold on cash quotations must be cash on delivery.

Thirty days from date of invoice given parties having good commercial rating, or known to be responsible and prompt.

Parties not well rated, or not known to be responsible and wanting credit, must furnish good reference from whom satisfactory reports as to financial responsibility must be received by us before bill lading of shipment will be released and credit allowed. Otherwise they must pay our sight draft with bill lading attached, at bank or express office on arrival of goods ordered, which will enable them to obtain the goods at depot.

Parties not responsible may have 30 days' time by furnishing a responsible surety.

Small orders from transient customers must be accompanied by the cash.

Remittances must be made by Chicago or New York Draft, Express, P. O. Money Order, or check. Exchange, Express charges and Telegrams must be prepaid.

All accounts subject to sight draft without notice after maturity.

Tools must be returned as soon as the roofing is laid, with our return card attached, and bill lading sent us as proof of shipment, to enable us to trace, if lost in transit, and know whose account to credit with tools returned.

Tools detained without special permission will be considered sold, and subject to sight draft.

WHEN ORDERING GOODS

THE FOLLOWING INSTRUCTIONS ARE VERY IMPORTANT :

ALWAYS state the style and quality of materials wanted. Fill out diagrams according to the style of your roof, giving the distance from cone to eave. State if you have made the necessary allowance for turn-down or projection (as the case may be), at eaves, and for side and for end-laps, or if you wish us to add them to your figures. When no mention is made of these matters, we shall assume that the same are left for us, and we will add sufficient material to provide for ridge-seam, (if any), or for turn-down at eaves, or for forming side and end laps for corrugated iron, etc.

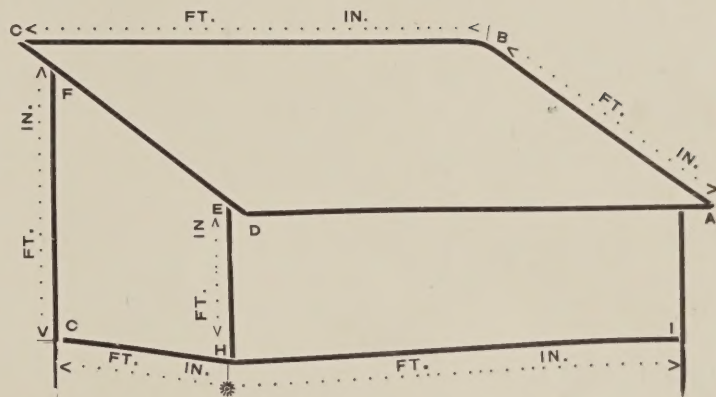
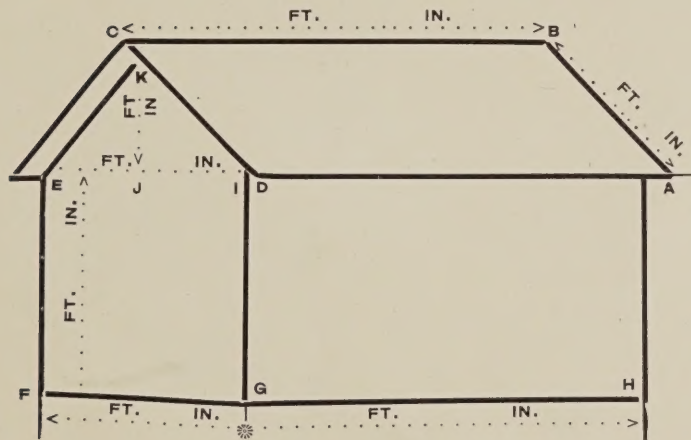
Please state in ordering corrugated iron, etc., if you desire us to ship nails for applying same, or dry paint for second coat.

If you want us to cut siding to fit, send drawing showing the distance from corners to openings, and distances above and below openings, also the size of openings; unavoidable waste in cutting to fit is invariably charged for at full price, with the labor of cutting added.

In ordering ceiling, give size of room, the space from center to center of joists, if possible, and the directions they take across the room.

Write plainly, state clearly the materials wanted, and designate the railroad or route over which you desire the same shipped. By carefully noting the directions above given, and applying them to your own order, unfortunate and trying mistakes, delays and errors will be avoided, which are otherwise bound to occasionally occur, through no fault of ours.

BLANKS FOR MEASUREMENTS.



State whether you have made the necessary allowances for projections and side and end laps, or wish us to make them. Make any other necessary explanations in blank space below.

THE CLARK-BRITTON PRINTING CO., 45-49 SHERIFF ST., CLEVELAND, O.

AVERY LIBRARY

